PGDP Citizens Advisory Board Water Task Force November 7, 2003 * CAB Office

CAB Members Present:

Linda Long

Jim Smart, Chair Dorothy Starr Bill Tanner

DOE Representatives Present:

David Dollins

Commonwealth of Kentucky

Representatives Present:

Brian Begley (via telephone)
Jon Maybriar (via telephone)
Todd Mullins (via telephone)
Lori Veal (via telephone)
Vicki Voisard (via telephone)

BJC Representatives Present:

Jeff Douthitt GEO (via telephone)

Support Staff Present:

Kim Crenshaw Kendra Payne

Public:

Merryman Kemp

Bobby Lee Vicki Jurka

The meeting was called to order at 12:00 p.m.

North-South Diversion Ditch Update

Dollins reported Section 2 of the North-South Diversion Ditch (NSDD) is one third excavated and approximately 500 out of 1500 burrito bags have been filled. He stated all of the tests screening for radionuclides have been below detection levels. He said trichloroethylene (TCE) samples have also shown no detection levels, but they have not yet obtained the validated results.

Smart asked if any volatile organic compound screening had been done in the field. Maybriar said a portable Gas Chromatography instrument has been used on about two dozen random burrito bag samples and no TCE has been detected. Dollins said the U.S. Department of Energy (DOE) is doing this excavation because there are six metals and one radiocnuclide (RAD) that was a surface risk exposure issue exceeding the 10⁻⁴ action level. He said the TCE samples were tested to ensure there was no listed waste in the

NSDD. Tanner asked if the burrito bags would be disposed in the C-746-U-Landfill. Dollins said the bags are in a staging area and eventually they would go to the landfill.

Smart asked about the schedule for the NSDD over the next few weeks. Dollins said DOE would continue until all 1500 burrito bags were filled and that the goal is to be finished by the end of the year.

Maybriar said a problem was discovered with the amino assay test kits used for this project. He stated the kits were calibrated to detect on the high side biased in favor of protection, but they are finding out they are sensitive to the environment. He stated all of the samples would be sent to the lab until the sensitivity issue with the kits is resolved. Maybriar also said 30 samples had been sent to the lab to be analyzed for polychlorinated biphenyls (PCBs). He said Bonilla has been sending the RAD sample results to the Commonwealth of Kentucky and according to the data, no RAD levels have been high enough to prevent the soil from going in the landfill.

Maybriar said he had received a request from Bechtel Jacobs Company LLC (BJC) to fill in the north section of the NSDD with eight to twelve feet of soil (after excavation) instead of using two feet of clay and two feet of soil. He said this would require a letter from DOE. Dollins said the design plan initially said that the ditch would be grated back towards the basin to prevent off-site run-off. Maybriar said the Commonwealth of Kentucky is in the process of issuing a letter to DOE stating the requirements needed to approve this modification. Jurka said she had read that the NSDD was highly contaminated with PCBs. Dollins said the PCB issue is more prevalent outside the fence, mostly in Section 3.

Tanner presented copies of sampling data from Sections 3, 4, and 5 of the NSDD that was provided to the Waste Operations task force. He said Section 4 has the least amount of contaminants. Several members of the task force asked for copies of the NSDD data.

Agreed Order

Tanner said a discussion of the Agreed Order would be added to the Board meeting agenda for questions and comments to DOE. There were no questions or comments from the task force.

Recommendation: DOE to Perform Water Balance Around Site Complex

Smart stated he would like to propose a recommendation for DOE to perform a water balance around the site complex. He said he would like to put together a proposal and list how conducting a water balance would be valuable.

Dollins asked if the water balance is part of the Accelerated Cleanup Plan. Tanner said the water balance is not part of the Accelerated Cleanup Plan. He said that if a water balance is done properly it might increase the effectiveness of the Accelerated Cleanup Plan.

Dollins said a recommendation might have a better chance of being implemented if Murphie was aware of the idea and had some input before the recommendation was submitted to DOE. Tanner suggested that discussion of anticipated recommendations be added to the Board meeting agenda. He said when a task group has a recommendation, a member of the task force needs to make a presentation to explain the recommendation, including the background, concerns, and how the recommendation will benefit DOE.

Begley said a comprehensive scope was developed by the groundwater modeling group on the Water Budget in late 2000 and early 2001. He stated BJC was tasked to estimate the cost, but was delayed. He said he had a list of recommendations and scope that was researched at that time. Begley said it was strongly recommended by all of the researchers involved to conduct a water balance. He said that many involved could not understand why it had not already been done. Dollins asked Douthitt to follow up with Craig Jones regarding the cost estimate that BJC was researching.

Smart suggested a water balance presentation be put on the agenda for the January Water task force meeting. He said that BJC should present the research that was done by the groundwater modeling group.

Five-Year Review

Tanner said a water balance may impact the Five-Year Review. He stated, according to this document, the recent groundwater data suggests that the north extraction well fields may be failing to reduce the high concentration core of the Northwest and Northeast Plumes. Tanner said his interpretation is that the Pump and Treat system is not working and nothing is being done about it. Dollins said when the Northeast Plume Pump and Treat was set up, the monitoring wells were put in place primarily to detect technetium-99 (Tc99). He said the CAB should re-evaluate the effectiveness of the Northwest Plume Pump and Treat operations for a potential recommendation. Tanner said this needs to be considered after a water balance is complete. He said the majority of the groundwater problems are caused by the hydraulic gradient that results from all of the leaking pipes. He said if the leaks are stopped, the Pump and Treat may be removed and ultimately eliminate the hydraulic pressure that is forcing the plume north.

Douthitt stated he does not disagree with a water balance but does not think it will impact the Northeast Plume. He said the Northeast Plume monitoring data over a 14 year span clearly shows there is no presence of Tc99. He said Tc99 has been seen below or adjacent to the S and T Landfills, but he does not believe it is related to the Northeast Plume. Douthitt said regardless of leaking pipes, the water flow will always flow north toward the river.

Next Month's Agenda

The task force will not meet in December. Smart said he would like to move the January Water task force meeting to January 9.

Smart said he would like the January agenda to include:

- 1. Presentation on Water Balance
- 2. NSDD Update
- 3. Review Six-Phase Final Report
- 4. Next Month's Agenda

Tanner said he would like to add Five-Year Review as a future placeholder for the Water task force.

Jurka said she had spoke to someone that has the ability to break chemical bonds of TCE with nickel and iron. Smart asked Jurka to bring a summary to the next Water task force meeting.

Other

Tanner said he had received copies of the Operation and Maintenance Plan for the Northwest Storm Water Control Facility and the Site Investigation Workplan for the Southwest Plume if anyone would like to review the documents.

Smart said he would like for the support staff to send out the Executive Summary for each new document electronically as an attachment to the Notice of Document Availability emails.

The meeting adjourned at 1:30 p.m.

Action Items

Staff:

Provide copy of NSDD data to Jurka, Kemp, Lee, Long, and Smart.

Staff:

Add discussion of anticipated recommendations to Board agenda.

Staff:

Contact BJC/SAIC about Water Balance presentation.

Douthitt:

Contact Craig Jones for Water Balance cost estimate.

Staff:

Send Executive Summaries with Document Availability emails.

Staff:

Include Five-Year Review as an agenda place holder for a future task

force meeting.